

# OAR POLYNUCLEOTIDES, POLYPEPTIDES AND THEIR USE IN PHA PRODUCTION IN PLANTS

## ABSTRACT OF THE DISCLOSURE

The invention relates to the genes encoding 3-oxoacyl-[acyl carrier protein(ACP)] reductase (OAR). Compositions and methods for producing polyhydroxyalkanoate in transformed plants and transformed host cells are provided. Such methods find use in  
5 producing biodegradable thermoplastics in host cells and plants. Isolated nucleotide molecules, expression cassettes, isolated polypeptides and genetically manipulated host cells, plants, plant tissues, plant cells and seeds are also provided.

TO THE SECRET